

15. The dock leveler of Claim 2, and wherein the lip is free to rotate downward when the cylinder is in lift mode position with the actuator mechanism retracted.
16. The dock leveler of Claim 1, and wherein the said retraction spring tension is adjustable.

ABSTRACT

A hydraulically operated dock leveler having a single cylinder that raises the ramp and extends the lip. The leveler includes a ramp assembly that is hinged at its rear edge to a supporting structure and a lip that is hinged to the forward edge and can be pivoted between a downwardly hanging pendant position and an extended position. A lip extension crank is attached to the forward hinge and a hydraulic cylinder is interposed between the crank and the supporting structure. The hydraulic system includes a pump to provide fluid to the cylinder at the desired pressure to raise the ramp and extend the lip. By operating the cylinder, the ramp assembly rises from a horizontal cross traffic position to an upwardly inclined position. As the ramp nears the top of its inclined position the extension crank is actuated downward allowing the hydraulic cylinder to rotate the crank about the hinge and extend the lip. When operation of the pump is discontinued, the ramp will descend until the lip engages the bed of a truck. When the system pressure is dissipated the crank will retract allowing the lip to fall free and pendant when the cylinder is operated to store the dock leveler.